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(54) **HETEROGENEOUS DOUBLE-COATED  
SELF-ADHESIVE SHEET, AND DUST REMOVAL  
MAT, ARTICLE-FIXING MAT, AND  
ARTICLE-SUPPORTING MAT USING  
HETEROGENEOUS DOUBLE-COATED  
SELF-ADHESIVE SHEET**

e.g. of shoes, and the like.

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(57) Abstract

**PURPOSE:** To provide the sheet which comprises a substrate sheet, a specific self-adhesive layer formed on one side of the substrate sheet, and an adhesive layer formed on the other side and can be fixed to a suitable place with the adhesive layer and the self-adhesive layer of which is hardly transferable to an adherend and can be repeatedly washed with water and used.

**CONSTITUTION:** A self-adhesive layer 13 comprising a repeatedly usable polyurethane self-adhesive is formed on one side of a substrate sheet 1, and on the other side, an adhesive layer 12 is formed. Pref. on one side of a substrate sheet for a mat the self-adhesive layer is formed and on the other side, the adhesive layer is formed. Thus obtd. double-coated self-adhesive sheet is then fixed to a suitable place with the adhesive layer and the self-adhesive layer is used for removing dust,



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CLAIMS DETAILED DESCRIPTION TECHNICAL FIELD PRIOR ART EFFECT OF THE INVENTION  
TECHNICAL PROBLEM MEANS OPERATION EXAMPLE DESCRIPTION OF DRAWINGS DRAWINGS

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## DETAILED DESCRIPTION

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### [Detailed Description of the Invention]

[0001]

[Industrial Application] This invention relates to the goods support which used the goods fastener which used the dirt removal mat which used a heterogeneous adhesion double-sided sheet and this heterogeneous adhesion double-sided sheet, and this heterogeneous adhesion double-sided sheet, and this heterogeneous adhesion double-sided sheet.

[0002]

[Description of the Prior Art] If it was in the double-sided pressure sensitive adhesive sheet in the former, when preparing an adhesives layer in both sides of a radical sheet member, for example, applying to a dirt removal mat, while carrying out adhesion immobilization of that inferior surface of tongue at base material, such as a shoes on this upper surface.

[0003]

[Problem(s) to be Solved by the Invention] However, in applying, since the adhesives layer was only prepared in both sides of a radical sheet member if it was in this conventional double-sided pressure sensitive adhesive sheet, as a result of periodic duty's being impossible, a disposable fake colander was not obtained, but while taking and being hard to remove from goods moreover, it had un-arranging [ of having damaged or been easy to soil the goods concerned ].

[0004] The technical problem of this invention is canceling this un-arranging.

[0005]

[Means for Solving the Problem] in a heterogeneous adhesion double-sided sheet concerning this invention, in order to attain said technical problem, while forming an adhesive layer which becomes one side of a radical sheet member from polyurethane pressure-sensitive adhesion material in which periodic duty is possible, on the other hand, this radical sheet member is alike, and an adhesives layer is formed.

[0006] moreover, in a mat for dirt removal, while forming an adhesive layer which becomes one side of a radical sheet member for mats from polyurethane pressure-sensitive adhesion material in which periodic duty is possible, on the other hand, this radical sheet member is alike, an adhesives layer is formed, and while fixing said radical sheet member for mats to a part suitably by said adhesives layer, adsorption treatment of the dirt is carried out by said polyurethane pressure-sensitive adhesive layer.

[0007] moreover, in a goods firmly attached seat, while forming an adhesive layer which becomes one side of a radical sheet member from polyurethane pressure-sensitive adhesion material in which periodic duty is possible, on the other hand, this radical sheet member is alike, an adhesives layer is formed, and while fixing said radical sheet member to a part suitably by said adhesives layer, goods are suitably fixed removable by said polyurethane pressure-sensitive adhesive layer.

[0008] moreover, in a goods support sheet, while forming an adhesive layer which becomes one side of a radical sheet member from polyurethane pressure-sensitive adhesion material in which periodic duty is possible, on the other hand, this radical sheet member is alike, an adhesives layer is formed, and while fixing said radical sheet member to a part suitably by said adhesives layer, goods are suitably supported removable by said polyurethane pressure-sensitive adhesive layer.

[0009]

[Function] Since it forms the adhesive layer which consists of polyurethane pressure-sensitive adhesion material in which periodic duty is possible as an adhesive layer of other sides while it can carry out adhesion immobilization suitably with these adhesives at a body, since it is constituted as mentioned above (i.e., since the heterogeneous adhesion double-sided sheet concerning this invention formed the adhesives layer in one side), while adhesion material cannot shift to \*\*\*\*-ed easily, it can wash in cold water and repeat use of it can be carried out.

[0010] Furthermore, the activity mitigation and the purpose according to the location stuck by changing the adhesion reinforcement of said polyurethane pressure-sensitive adhesion material can be raised further.

[0011] Moreover, since it forms the adhesive layer which consists of polyurethane pressure-sensitive adhesion material in which periodic duty is possible as an adhesive layer of other sides while it can carry out adhesion immobilization suitably with these adhesives at a body, since it is constituted as mentioned above (i.e., since the mat for dirt removal concerning this invention formed the adhesives layer in one side), repeat use of it can be washed in cold water and carried out.

[0012] Moreover, since it forms the adhesive layer which consists of polyurethane pressure-sensitive adhesion material in which periodic duty is possible as an adhesive layer of other sides while it can carry out adhesion immobilization suitably with these adhesives at a body, since it is constituted as mentioned above (i.e., since the goods firmly attached seat concerning this invention formed the adhesives layer in one side), while adhesion material cannot shift to \*\*\*\*-ed easily, repeat use of it can be carried out.

[0013] Moreover, since it forms the adhesive layer which consists of polyurethane pressure-sensitive adhesion material in which periodic duty is possible as an adhesive layer of other sides while it can carry out adhesion immobilization suitably with these adhesives at a body, since it is constituted as mentioned above (i.e., since the goods support sheet concerning this invention formed the adhesives layer in one side), while adhesion material cannot shift to \*\*\*\*-ed easily, repeat use of it can be carried out.

[0014]

[Example]

[0015] In drawing 1, S is a heterogeneous adhesion double-sided sheet concerning this invention, and 1 is that radical sheet member. This radical sheet member 1 may be what kind of materials, such as elasticity resin, paper, textiles, and a nonwoven fabric.

[0015] 12 is an adhesive layer which consists of polyurethane pressure-sensitive adhesion material in which periodic duty is possible, and is formed in the surface (one side) of said radical sheet member 1. This adhesive layer 2 consists of polyurethane pressure-sensitive adhesion material, and this adhesion material is manufactured by the reaction of polyol and organic diisocyanate. Speaking concretely, furthermore, the prepolymer which has the end isocyanate radical from which the number of average functional groups makes a kind of 2 thru/or 2.6, or two sorts or more of polyol mixture react with superfluous organic diisocyanate, and is obtained. The polyurethane which the sum with the number of average functional groups of polyol mixture which the number of average functional groups is two or more, and is the component of a prepolymer exceeded 4, and NCO/OH equivalent ratio made a kind which is not larger than 5, or two sorts or more of polyol mixture react by 0.65-1.15, and was obtained is suitable. In addition, the degree of adhesion of the adhesive layer 2 concerned can be adjusted by adjusting the degree of a reaction.

[0016] 13 is a glue line and is formed in the rear face (on the other hand) of said radical sheet member 1. This glue line 13 is formed by applying the usual adhesives (thing in which periodic duty is impossible as a principle).

[0017] Next, drawing 2 and drawing 3 show the example of the dirt removal mat M concerning this invention. This dirt removal mat M carries out adhesion immobilization of said heterogeneous adhesion double-sided sheet S by that glue line 13 on the surface of the base material 2. And adsorption treatment of the dirt of the base in shoes 3, the dust in air, etc. is carried out by the adhesive layer 12 which consists of polyurethane pressure-sensitive adhesion material. When the removal mat M becomes dirty with dust etc., it rinses and this dust etc. is removed, and if it dries, it can be used again. In this case, the "radical sheet member 2 for mats" of the invention in this application is equivalent to the radical sheet member 1 of said heterogeneous adhesion double-sided sheet S.

[0018] Next, drawing 4 and drawing 5 show the example of goods firmly attached seat A concerning this invention. This goods firmly attached seat A carries out adhesion immobilization of said heterogeneous adhesion double-sided sheet S by that glue line 13, and fixes the object for disinfection, or the parts 5 for deodorization (it is equivalent to the "goods" of this invention) to the transmission section installation crevice (it is equivalent to "being a part suitably") 41 of the main part 4 of telephone removable by the adhesive layer 12 which consists of that polyurethane pressure-sensitive adhesion material. [ of this invention ] Since an adhesive layer 12 can maintain adhesion on an abbreviation permanent target, it can perform freely changing of the object for disinfection, or the parts 5 for deodorization.

[0019] Moreover, drawing 6 and drawing 7 use this goods firmly attached seat A for adhesion immobilization of the rubber 61 in the racket 6 for table tennis.

[0020] Next, drawing 8 shows the example of goods support sheet B concerning this invention. This goods support sheet B carries out adhesion immobilization of said heterogeneous adhesion double-sided sheet S by that glue line 13 on the surface (it is equivalent to "being a part suitably") 71 of a desk 7, and supports it in primary by fixing cop (it being equivalent to "goods" of this invention) 8 grade to the adhesive layer 12 which consists of that polyurethane pressure-sensitive adhesion material removable. [ of this invention ] Since an adhesive layer 12 can maintain adhesion on an abbreviation permanent target, the surface 71 of a desk 7 can support goods in the state of changing freedom.

[0021]

[Effect of the Invention] the heterogeneous adhesion double-sided sheet concerning this invention, since this radical sheet member was alike on the other hand and the adhesives layer was formed, while forming the adhesive layer which becomes one side of a radical sheet member from the polyurethane pressure-sensitive adhesion material in which periodic duty is possible Namely, since the adhesives layer was formed in one side, while being able to carry out adhesion immobilization suitably with these adhesives at a body Since the adhesive layer which consists of polyurethane pressure-sensitive adhesion material in which periodic duty is possible as an adhesive layer of other sides is formed, repeat use can be washed in cold water and carried out while adhesion material cannot shift to \*\*\*\*-ed easily.

[0022] Therefore, like before, if this heterogeneous adhesion double-sided sheet is used, since it is not necessary to exchange, while also being able to prevent throwing away and being able to improve economical efficiency therefore, \*\*\*\*-ed of adhesion material will not be polluted or damaged.

[0023] Furthermore, the activity mitigation and the purpose according to the location stuck by changing the adhesion reinforcement of said polyurethane pressure-sensitive adhesion material can be raised further.

[0024] Moreover, on the other hand, this radical sheet member boils the mat for dirt removal concerning this invention, and it forms an adhesives layer while it forms the adhesive layer which becomes one side of the radical sheet member for mats from the polyurethane pressure-sensitive adhesion material in which periodic duty is possible. Since it is what carries out adsorption treatment of the dirt by said polyurethane pressure-sensitive adhesive layer while fixing said radical sheet member for mats to a part suitably by said adhesives layer, That is, since the adhesive layer which consists of polyurethane pressure-sensitive adhesion material in which periodic duty is possible as an adhesive layer of other sides is formed while being able to carry out adhesion immobilization suitably with these adhesives at a body, since the adhesives layer was formed in one side, repeat use can be washed in cold water and carried out.

[0025] If this mat for dirt removal is used, since it is not necessary to exchange unlike the former, throwing away can be prevented and, therefore, economical efficiency improves.

[0026] Moreover, on the other hand, this radical sheet member boils the goods firmly attached seat concerning this invention, and it forms an adhesives layer while it forms the adhesive layer which becomes one side of a radical sheet member from the polyurethane pressure-sensitive adhesion material in which periodic duty is possible. Since it is what fixes goods removable suitably by said polyurethane pressure-sensitive adhesive layer while fixing said radical sheet member to a part suitably by said adhesives layer, Namely, since the adhesives layer was formed in one side, while being able to carry out adhesion immobilization suitably with these adhesives at a body Since the adhesive layer which consists of polyurethane pressure-sensitive adhesion material in which periodic duty is possible as an adhesive layer of other sides is formed, repeat use can be carried out while adhesion material cannot shift to \*\*\*\*-ed easily.

[0027] If this goods firmly attached seat is used, since it is not necessary to exchange unlike the former, throwing away can be prevented and, therefore, economical efficiency improves.

[0028] Moreover, on the other hand, this radical sheet member boils the goods support sheet concerning this invention, and it forms an adhesives layer while it forms the adhesive layer which becomes one side of a radical sheet member from the polyurethane pressure-sensitive adhesion material in which periodic duty is possible. Since it is what supports goods removable suitably by said polyurethane pressure-sensitive adhesive layer while fixing said radical sheet member to a part suitably by said adhesives layer, Namely, since the adhesives layer was formed in one side, while being able to carry out adhesion immobilization suitably with these adhesives at a body Since the adhesive layer which consists of polyurethane pressure-sensitive adhesion material in which periodic duty is possible as an adhesive layer of other sides is formed, repeat use can be carried out while adhesion material cannot shift to \*\*\*\*-ed easily.

[0029] If this goods support sheet is used, since it is not necessary to exchange unlike the former, throwing away can be prevented and, therefore, economical efficiency improves.

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DESCRIPTION OF DRAWINGS

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[Brief Description of the Drawings]

[Drawing 1] It is the cross section of the heterogeneous adhesion double-sided sheet concerning this invention.

[Drawing 2] It is the perspective diagram of the dirt removal mat concerning this invention.

[Drawing 3] III-III in drawing 2 It is a line expanded sectional view.

[Drawing 4] It is explanatory drawing of the goods firmly attached seat concerning this invention.

[Drawing 5] V-V in drawing 4 It is a line expanded sectional view.

[Drawing 6] It is explanatory drawing of other examples of the goods firmly attached seat concerning this invention.

[Drawing 7] VII-VII in drawing 6 It is a line expanded sectional view.

[Drawing 8] It is the cross section of the goods support sheet concerning this invention.

[Description of Notations]

A -- Goods firmly attached seat

B -- Goods support sheet

M -- Dirt removal mat

S -- Heterogeneous adhesion double-sided sheet

1 -- Radical Sheet Member

12 -- Glue Line

13 -- Adhesive Layer

2 -- Radical Sheet Member for Mats

41 -- Transmission Section Installation Crevice of Main Part of Telephone (Suitably Part)

6 -- Racket (Suitably Part)

5 -- Object for Disinfection, or Parts for Deodorization (Goods)

61 -- Rubber for Rackets

71 -- Surface of Desk (Suitably Part)

8 -- Cop (Goods)

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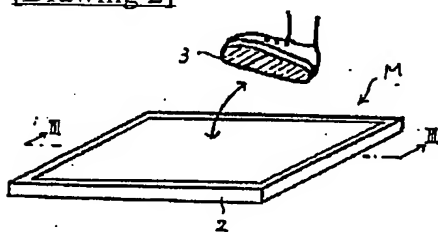
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## DRAWINGS

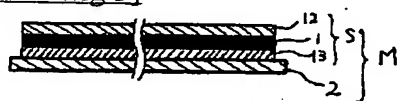
[Drawing 1]



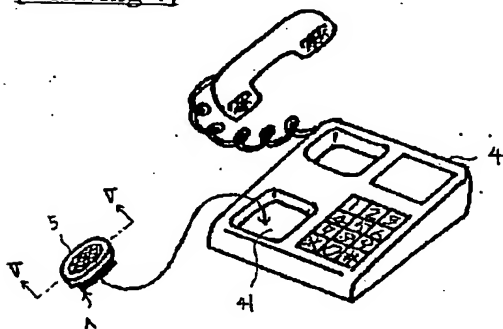
[Drawing 2]



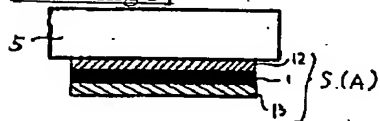
[Drawing 3]



[Drawing 4]

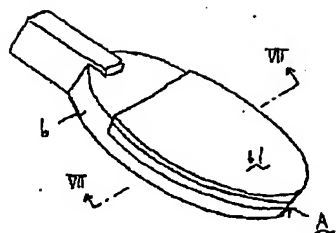


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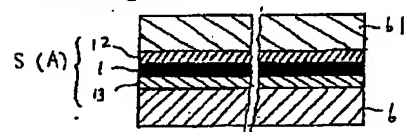


[Drawing 6]

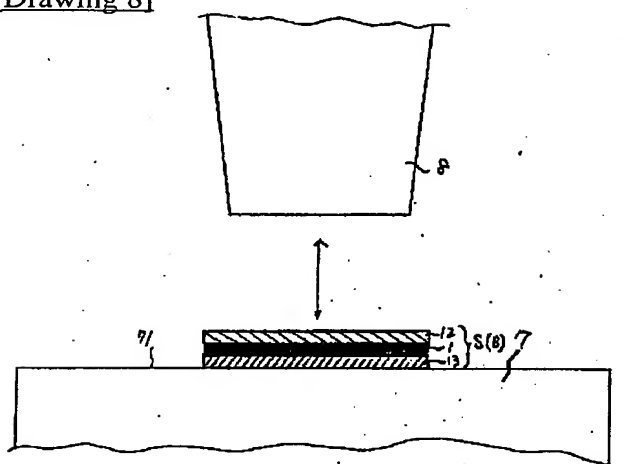
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[Drawing 7]



[Drawing 8]



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